

**Figure 6.** Modified shorelines along the trunk of the Neuse River Estuary in December 2007. The inset is an example of a shoreline stabilized with riprap along the Oriental waterfront.

## **SUMMARY**

Erosion of estuarine shorelines is an ongoing and natural process within the northeastern North Carolina coastal system. Erosion rates are extremely variable, but the majority of the estuarine shorelines are currently eroding. This rapid and significant loss of land has led many property owners to use various stabilization methods to combat erosion. Little is known of either the short-term and long-term ecological impacts that these hard structures might have on the system, particularly if the processes of climate change and sea-level rise continue. To preserve our coastal estuarine resources and maximize human utilization, long-term management solutions to shoreline recession must be in harmony with the dynamics of the coastal system.

A digital version of this document, along with reports on related research funded by a grant from the University of North Carolina system, can be accessed at the North Carolina Coastal Hazards Decision Portal: http://www.coastal.geology.ecu.edu/NCCOHAZ/.